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ABSTRACT

A modified use of the Delphi technique to determine institutional goals for a community college learning resources center is described in this report. A committee of faculty and staff acted as "selected experts" in determining the initial goal statements. Processes and techniques for collapsing the large number of goal statements to a few detailed positive and negative goal statements are presented. The positive goal areas derived were: (1) small student discussion groups; (2) better learning environment; (3) better instruction; (4) individualized instruction; and (5) better organizational structure. Negative goal areas derived were: (1) faculty overload; (2) administrative misuse; (3) lack of small student discussion groups; and (4) dehumanization of students. These goals in their final statement forms were derived in view of the perceived purpose of the learning resources center as allowing the community college to respond to increasing student enrollments in the face of diminishing revenues without lowering the quality of education offered. The methodology used to bring about goal convergence is reported in a step-by-step manner so that interested researchers wishing to replicate the study at their institution may do so, and a brief literature review describes some possible applications of Delphi in other areas of education. (AL)

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LOS ANGELES CITY COLLEGE

AN EX POST FACTO NEEDS ASSESSMENT USING A MODIFIED DELPHI TECHNIQUE TO DETERMINE THE GOALS OF A COMMUNITY COLLEGE LEARNING RESOURCES CENTER

JC 720 096

Research Study #72-6

Albert J. Landini
Ben K. Gold
Office of Research
May, 1972

UNIVERSITY OF CALIF.
LOS ANGELES

MAY 15 1972

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

P R E F A C E

Mr. Albert Landini is currently working part-time in the Los Angeles City College Research Office while pursuing a doctorate in conjunction with the Center for the Study of Evaluation at U.C.L.A. His background includes both an M. A. and an M.P.A., employment as City Planner for the City of Los Angeles, and part-time teaching at West Los Angeles College and Santa Monica City College.

We are pleased to be able to have his talents available to us, and especially pleased to have them utilized in carrying the major responsibility for the project described herein.

B. K. Gold
Director of Research
Los Angeles City College

TABLE OF CONTENTS

Section		Page
I.	INTRODUCTION	1
	The problem	1
	Statement of purpose	2
II.	REVIEW OF THE LITERATURE	2
	The Delphi Technique	3
	Some Educational Applications	3
III.	METHODOLOGY	4
	The problem defined	4
	Selection of experts	4
	First iteration (Phase I)	5
	Second iteration (Phase II)	6
	Third iteration (Phase III)	6
IV.	DATA ANALYSIS	7
	Use of the median	7
	Goal convergence	8
	Collapse of goals	8
	Final goal statements	11
V.	SUMMARY AND CONCLUSION	12
	Interpretation of final goals	12
	Use of final goals	13
	Bibliography	
	Appendices	

LIST OF FIGURES

Figure		Page
1.	Worksheet Format	8
2.	Positive and Negative Statements	9
3.	Global Goal Areas	9-10

AN EX POST FACTO NEEDS ASSESSMENT USING A MODIFIED DELPHI TECHNIQUE TO DETERMINE THE GOALS OF A COMMUNITY COLLEGE LEARNING RESOURCES CENTER

I. INTRODUCTION

Los Angeles City College (LACC) is an inner-city school and, like most educational institutions in similar situations in present day metropolitan America, it is faced with escalating educational costs and static or even decreasing revenues. To meet this challenge successfully requires the maintenance of existing high quality educational programs in the face of imposed budget limitations. Earlier pilot projects involving auto-tutorial (A-T) devices at the College's Learning Resources Center (LRC) indicated that contemporary educational technology could play a significant role in alleviating the problem. Hence, plans were laid and implemented to construct a modern, large scale LRC on the LACC campus.

The problem. As construction of the new facility progressed, discussions between the Research Office and a number of campus people revealed that there was a good deal of apprehension about what the effects of the new LRC would be on the instructional program, faculty-student ratio, student contact hours, and other factors. When presented with this information the Dean of Instruction and Dean of College Development agreed that it was worthwhile to crystalize these apprehensions and make them known to all involved. At the same time it was deemed beneficial to prepare specific documentation attempting to state precisely what the LRC should be expected to accomplish in terms other than cost-savings or campus prestige.

Statement of purpose. Thus, it was decided to verbalize the thinking of campus people with regard to the LRC through the medium of this report. To do this, it was necessary to collectivize many different "feelings" and "attitudes" people held about the LRC into a series of statements having meaning for all parties. The so-called Delphi method for achieving consensus of opinions was selected as the best technique for achieving this desired end.

In the initial "brainstorming" session preceding the beginning of the actual project it was thought that the project's basic effort could best be directed toward trying to obtain consensus as to what desirable goals should be stated for the LRC. These stated goals could then, perhaps at a later date, serve as a basis for producing some kinds of measures for determining how well these goals were being attained.

A second benefit foreseen as resulting from the project was the assistance that would be provided to both faculty and administration if some of the concerns and apprehensions that everyone felt, could be pinned down so that all involved could be made aware of them.

II. REVIEW OF THE LITERATURE

Numerous technical documents have been produced to aid the interested researcher in thoroughly understanding the mathematical assumptions and mechanics that lay behind the Delphi technique. It seems inappropriate to review that literature in this paper; however appropriate technical references are cited in the Bibliography for use by those inclined to read them. What has been done in this portion of the paper is to present sufficient material to familiarize the generalist with the technique used and demonstrate some other uses of Delphi technique in an educational setting.

The Delphi technique. Dr. Norman C. Dalkey of RAND Corporation in Santa Monica, California has been the primary advocate and developer of the Delphi method. In one of his earlier works, The Delphi Method: An Experimental Study of Group Opinion, he neatly reviews the methodology.

In that review Dalkey informs us that:

> "The Delphi technique is a method of eliciting and refining group judgments. The rationale for the procedure is primarily the age-old adage 'two heads are better than one,' when the issue is one where exact knowledge is not available. The procedure has three features: (1) Anonymous response - opinions of members of the group are obtained by formal questionnaire, (2) Iteration and controlled feedback - interaction is effected by a systematic exercise conducted in several iterations with carefully controlled feedback between rounds, (3) Statistical group response - the group opinion is defined as an appropriate aggregate of individual opinions on the final round. These features are designed to minimize the biasing effects of dominant individuals, of irrelevant communications, and of group pressure toward conformity."

Research was conducted using the Delphi technique to explore the nature of information processes. In these efforts the goal was to explore the differences in (1) a comparison of face-to-face discussion with the controlled - feedback interaction, and (2) a thorough evaluation of controlled feedback as a technique of improving group estimates. This work substantiated the validity of the Delphi technique as a means of providing "better"answers of partial information. More importantly it was found that Delphi procedures resulted in a quantitatively definable process.

Some educational applications. The use of Delphi technique has been extended beyond the forming of a group consensus as to the number of occurrences projected for a particular phenomenon to being used as an aid to getting a group's central opinion about organizational goals and priorities. In both of these situations, educational researchers can use Delphi technique to their advantage.

Specific applications for the technique can be easily found in the areas of curricula planning and goal determination for the college at large as well as for organizational sub-units such as divisions or departments. Unfortunately examples of such uses of Delphi technique in these areas are lacking and the fledgling researcher must feel his way along when using Delphi technique in such an educational setting.

III. METHODOLOGY

The problem defined. After commitment to the task at hand, the Research Office staff attempted to state specifically the problem as it was perceived by them. In final form the project's objectives were stated thusly:

(1) Construct a list of possible negative aspects and positive goals thought to be associated with the new LRC at LACC.

(2) Rate these negative aspects and positive goals as to their relative importance.

Selection of experts. In determining the goals for any organization or organizational effort it is desirable to initially reduce the population associated with the effort to some reasonable sample representative of the total group. With the LRC, the concerned population was composed of students, faculty, staff, and outside community members. However, time constraints on the project prevented the selection of a panel of experts representative of this total group to serve as a goals committee.

There was, at the time this project was undertaken, a Media-Oriented Systems Technology (MOST) Task Force already convened. It was composed of twenty-eight (28) faculty and staff members and had as its declared

purpose, the development and implementation of media to be utilized in instruction is selected courses at LACC. This group was chosen as the goals committee.

It should be noted that this group of "selected experts" suffered as a whole in that membership reflected systematic bias in its original selection, and the Task Force lacked student members and community representatives. On the other hand the high interest level of the MOST Task Force members assured good cooperation with the project and, as was later borne out, their viewpoints were sufficiently divergent so as to represent a variety of concepts regarding the LRC.

First iteration (Phase I). The project actually got underway with an introduction of the Research Office staff to the MOST Task Force, and an explanation of the project by the research staff. This was followed up by a letter sent to the MOST group on February 16, 1972 (see appendices) initiating Phase I of the project.

It was the purpose of that communique to briefly restate the project's purpose to our MOST group and solicit from them some statements as to what they believed would be both positive goals and negative aspects associated with the LRC. They were asked to make their statements sufficiently broad so as to not be limited to any specific course, but rather reflect some overall effect on students, faculty, and administrators.

Fifteen MOST Task Force members responded to the original instrument. Negative and positive responses from the participants were compiled and a list made of them. On that list duplicate statements were eliminated, and some editing was performed to put all of the statements into a similar language style format.

Second iteration (Phase II). In Phase II the list of positive and negative statements gathered and compiled in Phase I were returned to all members of the MOST group that was acting as the goals committee in this project. This list of statements was transmitted by letter to the MOST program members on February 28, 1972 (see appendices), in which they were asked to read both the positive and negative statements and assign them values ranging from zero to one hundred. Higher numbers indicated those statements thought of as having the most potential impact on the LRC, low scores indicated those having the least impact.

Fourteen MOST Task Force members responded to the Phase II instrument. With the return of these statement lists with value scores assigned them, the research staff set about determining the median value for each of the statements. After the median value was determined for each of them, a second list was prepared.

The second list was a shortened one. Statements having a median value less than 50 were subjectively judged by the research staff as being of relatively little importance to the MOST program members. In addition to being shorter, the second list was different because it showed the median score determined for each statement as well as having those statements listed in rank order of those median scores.

Third iteration (Phase III). In this last Phase the list of rank-ordered statements with median values prepared in Phase II was sent to the MOST Task Force on March 24, 1972 (see appendices). The Task Force members were informed that this was the last section of the project requiring their active participation.

The instructions accompanying the instrument in the third iteration asked the participants to again read the statements, but this time to take note of the median value assigned to them. With this information it was thought, by the research staff, that individual raters would have some idea of how other MOST program members felt about what was important or not important in terms of positive and negative aspects associated with the LRC.

Sixteen rating sheets were returned this time to the Research Office. These sheets with the new values were then reviewed and new median scores determined for each of the statements. This marked the close of Phase III and the Research Office staff set about inspecting the data they had collected.

IV. DATA ANALYSIS

After the Phase III list of statements sent to the MOST Task Force were returned, the values assigned to those statements were compiled and the median value for each statement was determined. Thus, the median was used again with the data collected in the third iteration to indicate central tendency on the part of the respondents for each positive and negative statement.

Use of the median. The logic in using the median as the statistical representative of the group answer lay primarily in wanting to minimize the effect of extreme scores assigned to the various statements. Dalkey explains his use of the median as being that, "If the range of group answers includes the true answer, then, in general, the median is closer to the true answer than more than half of the group."

Goal convergence. The purpose of resubmitting the list of positive and negative statements to the goals committee was to try and narrow down their ideas and opinions regarding the LRC. Once the median values had been determined for statements ranked in Phase III, a worksheet formatted as shown below was constructed:

FIGURE I

1st rank	2nd rank	Statement	1st median	2nd median

When completed this worksheet gave the research staff a means of comparing (1) the relative importance of each positive and negative statement when compared to all other positive and negative statements respectively, and (2) the change in importance of each statement from the second to the third iteration.

After reviewing the worksheet the research staff concluded that those statements not having a median value of 75 on the third iteration were of insufficient value to all parties to be considered further. Other means of reaching this decision could have included the use of only those statements in the upper quartile of those outside plus one standard deviation. However, neither of these would have been superior to the methodology used.

Collapse of goals. A final worksheet was prepared showing positive and negative statements in rank order whose third iteration median scores were 75 or greater. The format was similar to that used in the initial data analysis worksheet described in Figure 1.

FIGURE 2

POSITIVE STATEMENTS

No.	1 st Rank	2 nd Rank	Statement	1 st Median	2 nd Median
1	2	1	Establishment of small discussion groups	90	90
2	2	1	Make education more interesting and stimulating	90	90
3	5	1	Provide increased aid to hardworking, slow learning students	85	90
4	7	1	Repeated access to a particular course portion	80	90
5	1	5	More instructor and small student group interaction at no additional expense	93	88
6	7	5	Students advance at individual pace	80	88
7	4	7	Give student instant feedback as to learning success	88	85
8	7	7	Students absorb lecture material at their own speed	80	85
9	15	9	Improved learning situations	75	80
10	6	10	Increase in individualized, professional and humanized instruction	83	80
11	7	10	Provide opportunity for new teaching techniques	80	80
12	7	10	More student and instructor interaction	80	80
13	7	10	Improved course content and subject matter review by instructors	80	80
14	7	10	Updating instructors approach to teaching	80	80
15	17	10	Increased contribution to student learning	70	80
16	23	10	Improvement of instruction	68	80
17	29	17	Better organized classes	60	79
18	15	18	Improved instructor creativity in communicating material	75	75
19	28	18	Increased student gain	62	75

NEGATIVE STATEMENTS

1	1	1	Instructor fear that project purpose is to decreas their number while increasing student load	85	92
2	1	2	Lowered faculty morale	85	90
3	4	2	Regard A-T as panacea for cost cutting	80	90
4	4	2	Air of distrust between faculty and administration regarding the project	80	90
5	4	5	Excessive instructor production workload	80	85
6	13	6	Administrative misuse	68	82
7	1	7	Inadequate funds allocated for program maintenance	85	80

NEA

NEGATIVE STATEMENTS (continued)

8	7	7	Increase student alienation through loss of identity in large lecture classes	78	80
9	7	7	Improbable that small discussion groups will be formed	78	80
10	10	7	Loss of human inter-relationships	70	80
11	14	7	Dehumanization of student life	65	80
12	9	13	Increased impersonalization of learning process	72	75

The worksheet shown in Figure 2 gave the research staff a means of quickly noting the effect the third iteration had upon the goals committee participants in bringing about a convergence of their opinions. It was now necessary to collapse this large number of important positive and negative statements into a final set of goal statements.

Collapse of goals. Individual statements from the final goals work sheet were typed onto cards. These in turn were submitted to a small panel of non-partisan reviewers who were familiar with the problem. That group's purpose was to collapse the list of statements into major subject areas, and to identify the areas in global terms. The areas identified and labeled are shown in Figure 3.

FIGURE 3
GLOBAL GOAL AREAS
Positive Statements

* Small student discussion groups
* Better learning environment
* Better instruction
* Individualized instruction (machinery)
* Individualized instruction (instructor)
* Better organizational structure

Negative Statements

* Faculty overload
* Administrative misuse
* No small student discussion groups
* Dehumanizing of students

When this stage was completed the research staff had the final important statements grouped by major global goal areas. The task then present was to construct final goal statements representing the global areas and all of the positive and negative statements in each area.

Final goal statements. The final goal statements were prepared by the research staff and are presented here. Positive statements were labeled goals and stated as: Los Angeles City College courses using the new Learning Resources Center and Auto-Tutorial services, will

* benefit from the establishment of increased student-teacher interaction through the formation of small student discussion groups, occurring at no additional cost to the instructional program

* experience an increase in professional quality and humanization of instruction for their individual students

* witness a general improvement of instructional quality through improved course content, periodic subject matter review, and heightened creativity in communicating subject matter material to students

* have instructors who routinely update approaches and use new teaching techniques in better organized courses

* allow students to move through and review course material at their own pace regardless of their individual ability level, knowing if they have completed a section successfully or need to repeat it

* realize increased student gain, by having improved learning situations that make education more interesting and stimulating

It was easy enough to call the positive statements goals, but the research staff was hard pressed to label the negative statements in an appropriate manner. A possible identifier for these negative statements might have been apprehensions or anti-goals. However, as the project progressed it seemed best to identify the collapsed negative statement series as concerns. Hence, the final negative-goal statements were thought of as concerns and were expressed as: Los Angeles City College personnel associated with courses using the new Learning Resources Center and Auto-Tutorial services are concerned that:

* a growing mistrust between faculty and administration will ensue because of administrative use of the programs potential to effect cost-cutting activities, while the program itself is underfunded

* instructors involved with the program will experience diminished morale because their workload is increased and faculty ranks in general are thinned because of the programs success

* small discussion groups will not be formed and this will result in increased student alienation through loss of self-identity in large lecture classes

* the learning process will become increasingly impersonalized because of loss of human inter-relationships, thus dehumanizing student life.

V. SUMMARY AND CONCLUSIONS

Interpretation of final goals. At the outset of this report it was stated that its purpose was to verbalize the expectations and apprehensions that campus people held regarding the LACC LRC. This was attempted using the Delphi technique.

SUMMARY AND CONCLUSIONS (continued)

As the project progressed it soon became apparent that what would be accomplished here was the listing of very broad or global goals and concerns associated with the LRC. In interpreting these final broad statements one should note their lack of operational construction in measurable terms. This is not a hindrance, but rather an asset as it allows future research activities in this area to center on specific questions.

Use of final goals. The broad global goals and concerns presented here are inadequate for exact measurement of the LRC success or lack of it. Rather, these statements have been constructed as guides to further inquiry. In using these statements in any form of decision making the user should be aware they are part of even a greater overriding principle concerning the LRC, and this must be considered in interpreting, using or judging these statements.

That principle, as understood by the research staff, was that the initial decision to construct an LRC at LACC was to be able to respond to increasing student enrollments in the face of diminishing revenues without lowering the quality education offered. Hence, the goals and concerns offered in this report are in an open interpretive position, relative to this main principle. Any question directed toward the adequacy of the stated goals and concerns must therefore be done in the light of this guiding principle. Should the economic raison d'etre behind the decision to institute an LRC at this campus be found wrong, then it is only reasonable to state that new goals for its use must be developed in respect to the corrected guiding principle.

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A P P E N D I C E S

LOS ANGELES CITY COLLEGE
855 North Vermont Avenue
Los Angeles, California 90029

February 16, 1972

Media Coordinated Instructional Program Members

Dear

We are in the process of defining the goals and objectives associated with the decision to institute the new, larger, and more modern Learning Resources Center here at Los Angeles City College. Our reason for doing this is to seek alternative criteria for measuring the appropriateness and effectiveness of auto-tutorial programs in terms other than student achievement. It is anticipated that this set of broad goals will also aid instructors in their future development of media coordinated instructional programs to maximize the benefits inherent in teaching machines.

There seems at this time to be no list of good or bad events that we can expect from the active incorporation of a LRC into the instructional program. Therefore, we are asking you, the resident experts, to list in as specific terms as possible what you anticipate will be both the positive and negative gains or losses associated with auto-tutorial programs and a Learning Resources Center. While we have asked you to be specific in your responses, we want you to also make them sufficiently broad so as to not be limited to any specific course; but rather reflect some overall effect on students, faculty and/or administrators.

Your own, individual responses are the ones most important to us. Please do not spend more than ten or fifteen minutes in listing the positive and negative aspects you believe associated with the program. Do not confer with your associates and there is no need to sign your name.

Thank you very much for your cooperation.

Sincerely,

Ben K. Gold
Office of Research

Albert Landini
Research Assistant

BKG/AL:e
Enclosure

Please return to Research Office, Ad. 109F or to Ben Gold's box in the faculty mailroom by WEDNESDAY, FEBRUARY 23.

I. Positive gains or aspects I associate with auto-tutorial programs.

1.

2.

3.

4.

5.

II. Negative losses or aspects I associate with auto-tutorial programs.

1.

2.

3.

4.

5.

LOS ANGELES CITY COLLEGE
855 North Vermont Avenue
Los Angeles, California 90029

February 28, 1972

Media Oriented Systems Technology (MOST) Program Members

Dear

You'll recall that on February 16, 1972, we sent you a letter and a brief form asking what you expected to be the positive and negative aspects associated with auto-tutorial programs at L.A.C.C. That was Phase I of our efforts to establish and define goals and objectives relating to our new Learning Resources Center.

Phase I has been completed with the return of 15 questionnaires from MOST Program Members. Negative and positive responses from all persons participating have been compiled and listed on the attached form. Duplicate statements have been eliminated and some editing has been performed to put all statements into a similar style format.

In Phase II we are asking that you read each one of these positive statements as a potential goal or objective for our Learning Resources Center (LRC), and assign it a value ranging from zero to one hundred. Higher numbers indicate those statements reflecting the best goals for our LRC, and low scores identify the most inappropriate ones. You may use any number as much as you want. An absurd example would be to label all the statements as having a value of ten.

The list has both positive and negative statements. It is easy enough to call the positive statements goals. But what do we call negatives ones? There is hesitation to call them fears, and perhaps we should more appropriately call them apprehensions. In any case we all seem to have them to some extent regarding the LRC and this is an attempt to identify the ones most important to all of us.

Again we ask you to read the list of negative statements, and rate them from zero to one hundred as being the ones most likely to be associated with our LRC. Here also, the higher the number you assign will indicate the greater the strength of the apprehension. As with the positive statements you can use any number twice in your ratings.

Thank you again for your cooperation, as before there is no need to identify yourself and you may also return these rating sheets in the return envelopes provided directly to Research Office, Ad. 109F or to Ben Gold's mailbox. If you have any question about the procedure please contact either one of us on extension 281. This should be an individual effort involving only a minimum of time.

Sincerely,

Ben K. Gold
Office of Research

Albert Landini
Research Assistant

BKG/AL:e
Enclosure

INITIAL SET OF GOALS AND OBJECTIVES
(Duplicates Removed)

I. Positive gains or aspects associated with auto-tutorial programs SCORE-0-100

1. Avoidance of repetitive lecture sessions by instructors..... ———
2. Improved learning through flexible scheduling..... ———
3. Better organized courses..... ———
4. Allow students to make up work, tests or earn extra credit..... ———
5. Increase in individualized, professional and humanized instruction..... ———
6. Makes process evaluation possible..... ———
7. Improved demonstration of concepts, principles and relationships..... ———
8. Students absorb lecture material at their own speeds..... ———
9. More efficient use of student time..... ———
10. Better public relations image..... ———
11. Pictures will benefit the poor reader..... ———
12. Encouraging self discipline in students..... ———
13. Improved learning through enriched motivation..... ———
14. Multi-media provides for flexible instruction..... ———
15. Provide mass individualized instruction..... ———
16. Students learn more..... ———
17. Additional student aid for achieving learning mastery..... ———
18. Upgrade instructor effectiveness..... ———
19. Eliminate time devouring activities..... ———
20. Better student and instructor communication..... ———
21. Minimum inter-lecture variability..... ———
22. Students attention held by 1 to 1 situation in carrel..... ———
23. Provides more creative means to achieve instructional goals..... ———
24. Increased use of previously uneconomical materials..... ———
25. Provide opportunity for new teaching techniques..... ———
26. Greater flexibility for administrators in scheduling classes..... ———
27. Repeated access to a particular course portion..... ———
28. Evaluation project as possible dissertation topic..... ———
29. Student learning span shortened..... ———
30. Upgrade LACC student image..... ———
31. Improvement of instruction..... ———
32. Increased student gain..... ———
33. Gives student instant feedback as to learning success..... ———

Positive gains (continued)

34. Establishment of small discussion groups..... ____
35. More instructor and small student group interaction at no additional expense..... ____
36. Will result in a set of validated, instructionally potent, creative instructional sequences..... ____
37. Make education more interesting and stimulating..... ____
38. Increased specificity by instructors as to what is expected of students..... ____
39. Increased student and teacher morale..... ____
40. Increased contribution to student learning..... ____
41. Individual student learning pace allowed for..... ____
42. More student and instructor interaction..... ____
43. Easy to simplify material into dramatic themes..... ____
44. Students advance at individual pace..... ____
45. Improved learning situations ..... ____
46. Improved instructor creativity in communicating material..... ____
47. Greater flexibility for students in scheduling their courses..... ____
48. Increased insight into use of A-T materials..... ____
49. Will assist in teaching manual techniques..... ____
50. Possible reduction or maintenance of status quo of number of teachers..... ____
51. Improved course content and subject matter review by instructors..... ____
52. Increased development of student responsibility..... ____
53. Use of computer as a diagnostic tool..... ____
54. Presentation of subject matter in format more familiar to most students..... ____
55. Makes for greater positive feelings about instruction among students..... ____
56. Improved learning through group and individual interaction..... ____
57. Provide increased aid to hard working, slow learning students..... ____
58. Updating instructors approach to teaching..... ____
59. Student motivation increased..... ____
60. Cover more material in a given course..... ____
61. Makes outcome evaluation possible..... ____
62. Reduce dropout rate..... ____

II. Negative losses or aspects associated with auto-tutorial programs

		SCORE 0-100
1.	Achieving lifelong habit pattern change in instructors	____
2.	Little gain in real flexibility	____
3.	Increased student alienation through loss of idenity in large lecture classes	____
4.	Use of A-T material relegated to unexciting material	____
5.	Inability to incorporate new material into old "tapes"	____
6.	Improbable that small discussion groups will be formed	____
7.	Regard A-T as panacea for cost-cutting	____
8.	Inadequate funds allocated for program maintenance	____
9.	Instructor fear that project purpose is to decrease their number while increasing student load	____
10.	Incurrence of excessive expense to produce programs no more instructionally sound or creative than existing ones	____
11.	Dehumanized (impersonal) instruction	____
12.	Increased impersonalization of learning process	____
13.	Impersonalization of subject matter	____
14.	Lowered faculty morale	____
15.	Disregard lack of self discipline in LACC students	____
16.	Increase in number of incomplete grades	____
17.	Teacher resistence to articulating their course content	____
18.	Lack of current effective research	____
19.	High initial costs	____
20.	Administrative and technical barriers in the Learning Resources Center	____
21.	Dehumanization of student life	____
22.	Loss of human inter-relationships	____
23.	Disregard inability of instructors to adjust to using media	____
24.	Excessive, non-productive use, of media	____
25.	Unavailability of program texts for specific courses	____
26.	Will cause widespread hysteria among instructional staff about effects of "automation" on their employment	____
27.	Drain of money away from hiring new teachers	____
28.	Excessive instructor production workload	____
29.	Administrative misuse	____
30.	Lack of student-teacher interaction	____

Negative losses (continued)

SCORE 0-100

31. Force instructors to do "media thing" no matter how effective they are otherwise..... ____
32. Extreme friction between faculty and administration on class size and work load..... ____
33. Inadequate teacher self evaluation on projects relating to Learning Resources Center..... ____
34. Resistence to A-T by hysterial (instructors) will result in the development of vapid instructional programs..... ____
35. Complex subject matter will be over simplified..... ____
36. Air of distrust between faculty and administration regarding the project..... ____
37. Student resentment developed towards machines..... ____
38. An attitudinal division of faculty over use of A-T instruction..... ____
39. Quantity of education will replace quality..... ____
40. Possible inability to determine real (if any) instructional and attitudinal effects..... ____

LOS ANGELES CITY COLLEGE
855 North Vermont Avenue
Los Angeles, California 90029

March 24, 1972

Media Oriented Systems Technology (MOST) Program Members

Dear

This is Phase III of our mutual efforts to build a set of goals to be associated with the proposed Auto-Tutorial (A-T) programs in LACC's new Learning Resources Center (LRC). We want to say how pleased we are with the excellent cooperation received from all MOST members in aiding us in this project.

In Phase I of our Goals program MOST participants were asked to prepare short lists of statements about what they felt were positive and negative gains or losses they associated with the proposed A-T programs and the new LRC. This was an attempt to gather together some general feelings that MOST participants had about the LRC and A-T programs, that would later become the basis for some more concrete Goal statements.

Phase II was the first step in trying to assign the varying degrees of importance those many different statements had in terms of being Goals for our LRC and A-T programs. In that step you indicated how appropriate you felt each statement was as a Goal for our LRC by assigning it a score, ranging from zero or no-importance. Those scores were used by us to get some measure of the total group opinion as to the importance of each of these statements. The median value of all values assigned to a specific statement was deemed the best indicator of that statement's importance.

Now, Phase III is the next to the last step in our Goal formulation project. We are presenting you with a somewhat shortened list of the same statements sent to you in Phase II. Those excluded this time are ones that had a median score indicating they were of relatively little importance to the MOST group.

This Phase III list (attached to this letter) is different from the Phase II list, not only because it has been shortened, but also because it shows the median score for each statement that was determined from the results of Phase II, and ranks the statements in order of those median scores. With this information, you now have some idea of how the other MOST members feel about what is important or not important in terms of Goals for the LRA and A-T activities.

Thus, with this new information we are again asking you to rate from 0-100 the importance of each of these statements as an appropriate Goal or Fear to be associated with the LACC LRC and its proposed A-T activities. It is best to assign a number to each statement, even a very low one, rather than leave the space blank. However, you may leave the space blank if you believe that is the best response to be made.

With this information, the Research Office will try to combine the most important statements into complete sentences describing the Goals and Fears to be associated with our LRC. These will be submitted to you in Phase IV for your review and comment.

Thank you for your continuing help in this project. Please return the attached lists by Monday, April 10 (sooner if possible!)

Sincerely,

Ben K. Gold
Office of Research

Albert Landini
Research Assista.

BKG: AJL:e
Enclosures

I. Goals for proposed LACC Audio-Tutorial Programs

Rank		First Round Median	Second Round Score 0--100
1	More instructor and small student group interaction at no additional expense	93	
2	Establishment of small discussion groups	90	
2	Make education more interesting and stimulating	90	
4	Gives student instant feedback as to learning success	88	
5	Provide increased aid to hardworking, slow learning students	85	
6	Increase in individualized, professional and humanized instruction	83	
7	Provide opportunity for new teaching techniques	80	
7	Repeated access to a particular course portion	80	
7	More student and instructor interaction	80	
7	Students advance at individual pace	80	
7	Improved course content and subject matter review by instructors	80	
7	Updating instructors approach to teaching	80	
7	Students absorb lecture material at their own speed	80	
15	Improved learning situations	75	
15	Improved instructor creativity in communicating material	75	
17	Allow students to make up work, tests or earn extra credit	70	
17	Students attention held by 1 to 1 situation in carrel	70	
17	Provides more creative means to achieve instructional goals	70	
17	Increased contribution to student learning	70	
17	Improved learning through group and individual interaction	70	
22	More efficient use of student time	69	
23	Multi-media provides for flexible instruction	68	
23	Improvement of instruction	68	
25	Will result in a set of validated, instructionally potent, creative instructional sequences	67	
26	Avoidance of repetitive lecture sessions by instructors	65	
26	Provide mass individualized instruction	65	
28	Increased student gain	62	
28	Presentation of subject matter in format more familiar to most students	62	
29	Improved learning through flexible scheduling	60	
29	Better organized courses	60	
29	Improved demonstration of concepts, principles and relationships	60	
29	Pictures will benefit the poor reader	60	
29	Improved learning through enriched motivation	60	
29	Additional student aid for achieving learning mastery	60	
29	Better student and instructor communication	60	

(continued on next page)

GOALS (continued)

Rank		First Round Median	Second Round Score 0--100
29	Increased specificity by instructors as to what is expected of students	60	———
29	Greater flexibility for students in scheduling their courses	60	———
29	Increased development of student responsibility	60	———
29	Student motivation increased	60	———
40	Students learn more	55	———
40	Use of computer as a diagnostic tool	55	———
42	Encouraging self discipline in students	50	———
42	Upgrade instructor effectiveness	50	———
42	Eliminate time devouring activities	50	———
42	Increased use of previously uneconomical materials	50	———
42	Increased student and teacher morale	50	———
42	Easy to simplify material into dramatic themes	50	———
42	Increased insight into use of A-T materials	50	———
42	Makes for greater positive feelings about instruction among students	50	———
42	Cover more material in a given course	50	———
42	Makes outcome evaluation possible	50	———
42	Reduce dropout rate	50	———
42	Will assist in teaching manual techniques	50	———

II. Fears Associated With Proposed LACC A-T Programs

1	Inadequate funds allocated for program maintenance	85	———
1	Instructor fear that project purpose is to decrease their number while increasing student load	85	———
1	Lowered faculty morale	85	———
4	Regard A-T as panacea for cost-cutting	80	———
4	Excessive instructor production workload	80	———
4	Air of distrust between faculty and administration regarding the project	80	———
7	Increased student alienation through loss of identity in large lecture classes	78	———
7	Improbable that small discussion groups will be formed	78	———
9	Increased impersonalization of learning process	72	———
10	Dehumanized (impersonal) instruction	70	———
10	Teacher resistance to articulating their course content	70	———
10	Loss of human inter-relationships	70	———
13	Administrative misuse	68	———
14	Dehumanization of student life	65	———

(continued on next page)

FEARS (continued)

Rank		First Round Median	Second Round Score 0--100
15	Impersonalization of subject matter.....	62	———
15	Extreme friction between faculty and administration on class size and work load.....	62	———
17	Little gain in real flexibility	60	———
17	Incurrence of excessive expense to produce programs no more instructionally sound or creative than existing ones.....	60	———
17	High initial costs.....	60	———
17	Administrative and technical barriers in the Learning Resources Center.....	60	———
17	Disregard inability of instructors to adjust to using media.....	60	———
17	Drain of money away from hiring new teachers.....	60	———
17	Lack of student-teacher interaction.....	60	———
17	Resistence to A-T by hysterical(instructors) will result in the development of vapid instructional programs.....	60	———
17	An attitudinal division of faculty over use of A-T instruction.....	60	———
26	Disregard lack of self discipline in JACC students	55	———
27	Will cause widespread hysteria among instructional staff about effects of "automation" on their employment.....	52	———
28	Lack of current effective research.....	50	———
28	Excessive, non-productive use, of media.....	50	———
28	Force instructors to do "media thing" no matter how effective they are otherwise.....	50	———
28	Quantity of education will replace quality.....	50	———

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